I claim:

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1   1. A method for providing custom-engineered products, comprising:

2   providing an online catalog having an unavailable product/attribute selector;

3   receiving a selection of an unavailable product/attribute that requires one or more of

4   engineering and testing before it may be produced.

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2   2. The method of claim 1, further comprising:

2   suggesting an existing/standard product based upon and as a replacement for the

3   selection.

1   3. The method of claim 1, further comprising:

2   determining a resource cost for the unavailable product/attribute.

1   4. The method of claim 1, further comprising:

2   assigning a category of design requirements to the unavailable product/attribute.

1   5. The method of claim 4, further comprising:

2   determining a resource cost for the unavailable product/attribute;

3   assigning a first category to the unavailable product/attribute if the resource cost is

4   relatively lower;

5   assigning a second category to the unavailable product/attribute if the resource cost is

6   relatively higher.

1   6. The method of claim 4, further comprising:

2   transmitting a request for the unavailable product/attribute to an address associated with

3   the assigned category.

1   7. The method of claim 6, further comprising:

2   transmitting the request to a manufacturing facility for the unavailable product/attribute if

3   it is assigned to a first predefined category.

1   8. The method of claim 6, further comprising:

2   transmitting the request to an engineering department for the unavailable product/attribute

3   if it is assigned to a second predefined category.

1   9. The method of claim 1, further comprising:

2   providing a list of available products in the online catalog.

1   10. The method of claim 1, further comprising:

2   obsoleting an available product by moving it from the list of available products to a list of

3   unavailable products.

1   11. The method of claim 1, further comprising:

2   receiving an order of an available product and transmitting a request to a manufacturing

3   facility.

1   12. The method of claim 1, wherein the unavailable product/attribute selector comprises a list

2   of unavailable products/attributes.

1   13. The method of claim 12, further comprising:

2   classifying an item in the list of unavailable products/attributes.

1   14. The method of claim 1, wherein the unavailable product/attribute selector comprises an

2   online form.

1   15. A method for providing available and unavailable products/attributes and for operating an

2   associated computer system having at least one of each of the following:

3   a central processing unit (CPU);

4   a visual interface in communication with the CPU;

5   a memory in communication with the CPU; and

6   a user interface selection device in communication with the CPU;

7   the method comprising:

8   displaying a list of available products, stored in a memory of the computer system,

9   on a visual interface of the computer system; and

10   providing an unavailable product/attribute selector in the computer system.

1   16. The method of claim 15, further comprising:

2   storing in a memory of the computer system a list of unavailable products/attributes.

1   17. The method of claim 16, further comprising:

2   displaying the list of unavailable products/attributes on a visual interface of the computer

3   system.

1   18. The method of claim 16, further comprising:

2   storing in a memory of the computer system a category of design requirements associated

3   with the unavailable products/attributes.

1   19. The method of claim 15 further comprising:

2   receiving a selection of an unavailable product/attribute via a selection signal from a user

3   interface selection device of the computer system; and

4   displaying a resource cost to the unavailable product/attribute on a visual interface of the

5   computer system.

1   20. The method of claim 15 further comprising:

2   receiving a selection of an unavailable product/attribute via a selection signal from a user

3   interface selection device of the computer system; and

4   identifying, by a CPU of the computer system, one or more available products, from the

5   list of available products, that has similar characteristics to those of the selected

6   unavailable product/attribute; and

7   displaying the identified one or more available products on a visual interface of the

8   computer system.

1   21. The method of claim 15 further comprising:

2   generating a specification for a product in response to receiving, by a CPU of the

3   computer system, a selection signal from the user interface selection device of an

4   unavailable product/attribute.

1   22. The method of claim 21, further comprising:

2   transmitting from a CPU of the computer system via electronic transmission a signal

3   representative of the specification.

1   23. The method of claim 21, further comprising:

2   providing a list of resources in a memory of the computer system; and

3   allocating the list of resources using a CPU of the computer system, the allocation based,

4   at least in part, upon the specification.

1   24. The method of claim 21, further comprising using a CPU of the computer system for:

2   comparing the specification to the list of available products;

3   selecting an available product, from the list of available products, that has similar

4   characteristics to those of the specification; and

5   identifying a base material common to the specification and the selected available

6   product.

1   25. The method of claim 24, further comprising:

2   providing a list of base materials associated with the available products in a memory of

3   the computer system.

1   26. The method of claim 24 further comprising:

2   transmitting from a CPU of the computer system via electronic transmission a signal

3   representative of the base materials identified in the identification step.

27. The method of claim 21, further comprising using at least one CPU of the computer

1   system for:

2   comparing the specification to the list of available products;

3   selecting an available product, from the list of available products, that has similar

4   characteristics to those of the specification; and

5   determining a variance between the specification and the selected available product.

1   28. The method of claim 27, further comprising using a CPU of the computer system for:

2   assigning a category of design requirement to the variance.

1   29. The method of claim 28, further comprising:

2   transmitting from a CPU of the computer system via electronic transmission a signal

3   representative of the specification to an address associated with the assigned

4   category.

1   30. The method of claim 29 further comprising:

2   receiving a selection of an unavailable product/attribute via a selection signal from the

3   user interface selection device;

4   storing a resource cost heuristic in a memory of the computer system;

5   calculating a resource cost for the unavailable product/attribute based on the selected

6   unavailable product/attribute and the resource cost heuristic using a CPU of the

7   computer system.

1   31. The method of claim 29 further comprising:

2   receiving a selection of an unavailable product/attribute via a selection signal from a user

3   interface selection device of the computer system; and

4   using a CPU of the computer system for:

5   calculating a resource cost for the unavailable product/attribute;

6   comparing the resource cost to a list of available resources;

7   making an accept/reject decision.

1   32. The method of claim 29 further comprising:

2   storing in a memory of the computer system a list of unavailable products; and

3   moving an item from the list of available products to a list of unavailable products using a

4   user interface selection device of the computer system.

1   33. The method of claim 29 further comprising:

2   receiving a selection of an unavailable product/attribute via a selection signal from a user

3   interface selection device of the computer system; and

4   transmitting from a CPU of the computer system via electronic transmission a signal

5   representative of a request for quotation.

1   34. A method for offering products, comprising:

2   providing a set of available product data records in a memory, each available product data

3   record containing a specification for an associated available product;

4   providing a set of unavailable product data records in the memory, each unavailable

5   product data record containing a specification for an associated unavailable

6   product;

7   displaying the set of available product data records and the set of unavailable product data

8   records on a visual display;

9   receiving an input, via a user interface selection device, of a user selection from the set of

10   unavailable product data records.

1   35. The method of claim 34 wherein at least one of the unavailable product data records is a

2   variance from an available product data record.

1   36. The method of claim 34 wherein at least one of the unavailable product data records

2   represents an existing, but untested, product.

1   37. A method for offering custom products, comprising:

2   receiving into a processor an input, via a user interface selection device, of a specification

3   for an unavailable product;

4   executing a resource costing module in the processor to determine the resource cost for

5   creating the unavailable product;

6   transmitting from the processor via electronic transmission a price based upon the

7   resource cost.

1   38. A method for offering products, comprising:

2   providing a set of available product data records in a memory, each available product data

3   record containing a specification for an associated available product;

4   providing a set of variance data records in the memory, each variance data record

5   containing an allowed variance to an associated available product;

6   displaying the set of available product data records and the set of variance data records on

7   a visual display;

8   receiving an input, via a user interface selection device, of a user selection from the set of

9   variance data records.

1   39. A memory structure implemented in a computer system, comprising:

2   a read/write memory device coupled to the computer system providing the memory

3   structure;

4   an available product list implemented in the read/write memory;

5   an unavailable product/attribute selector implemented in the read/write memory allowing

6   selection of products/attributes not currently available from a given provider.

1   40. The memory structure of claim 39, wherein the unavailable product/attribute selector is

2   an unavailable product/attribute list.

1   41. The memory structure of claim 39, wherein the unavailable product/attribute selector

2   comprises an unavailable product/attribute request form.

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